**TECHNICAL DATA**
**DATA SHEET 4561, REV. A**

# HERMETIC POWER SCHOTTKY RECTIFIER
## Low Forward Voltage Drop

### Applications:

- **Switching Power Supply • Converters • Free-Wheeling Diodes • Polarity Protection Diode**

### Features:

- **Low Forward Voltage Drop**
- **High Efficiency**
- **High Frequency Application**
- **Guard Ring for Enhanced Durability and Long Term Reliability**

**MAXIMUM RATINGS** ALL RATINGS ARE @ $T_C$ = 25 °C UNLESS OTHERWISE SPECIFIED.

| RATING | SYMBOL | MAX. | UNITS |
|---|---|---|---|
| PEAK INVERSE VOLTAGE | PIV | 200 | Volts |
| MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C$=100 $^{O}$C) | $I_O$ | 7.5 | Amps |
| MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=8.3ms, Sine) | $I_{FSM}$ | 140 | Amps |
| MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode) | $R_{\theta JC}$ | 1.7 | °C/W |
| MAXIMUM OPERATING TEMPERATURE RANGE | Top | -65 to + 200 | °C |
| MAXIMUM STORAGE TEMPERATURE RANGE | Tstg | -65 to + 200 | °C |

**ELECTRICAL CHARACTERISTICS**

| CHARACTERISTIC | SYMBOL | MAX. | UNITS |
|---|---|---|---|
| MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f$ = 7.5 Amps)<br>$T_J$ = 25 °C<br>$T_J$ = 125 °C | $V_f$ | <br>0.92<br>0.76 | Volts |
| MAXIMUM REVERSE CURRENT ($I_r$ @ 20V PIV)<br>$T_J$ = 25 °C<br>$T_J$ = 125 °C | $I_r$ | <br>0.18<br>4.0 | mA |
| MAXIMUM JUNCTION CAPACITANCE ($V_r$=5V) | $C_T$ | 150 | pF |

**SENSITRON**
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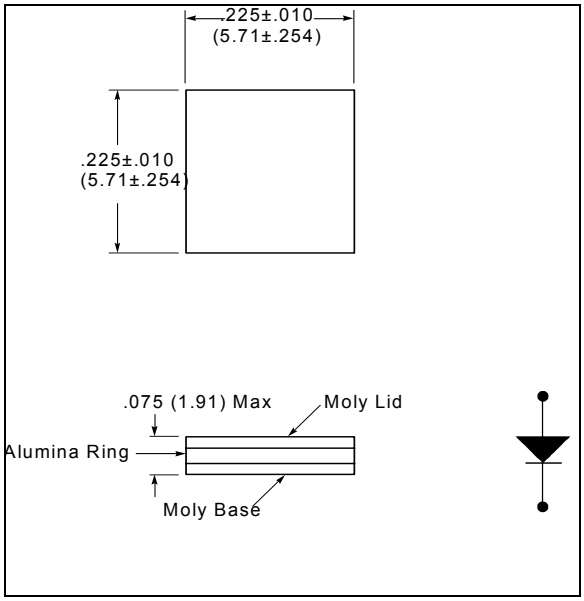
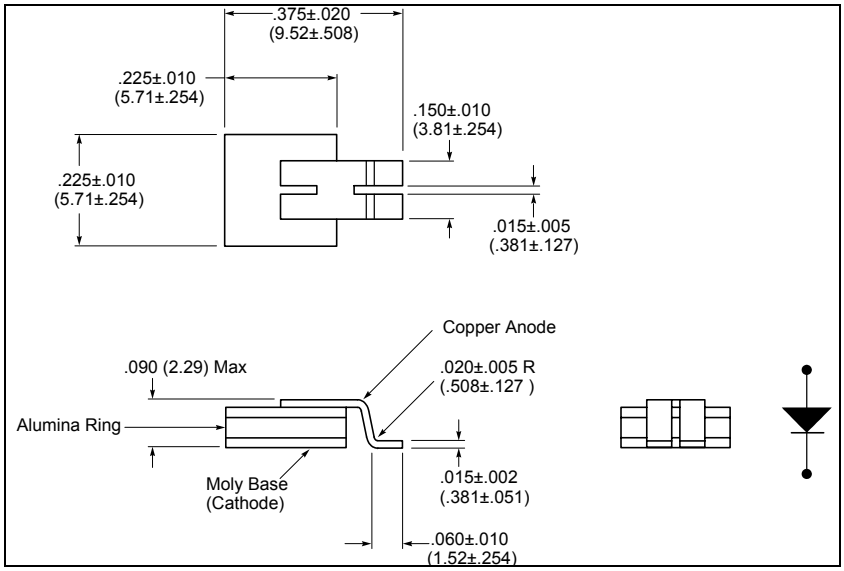
## MECHANICAL DIMENSIONS: In Inches / mm

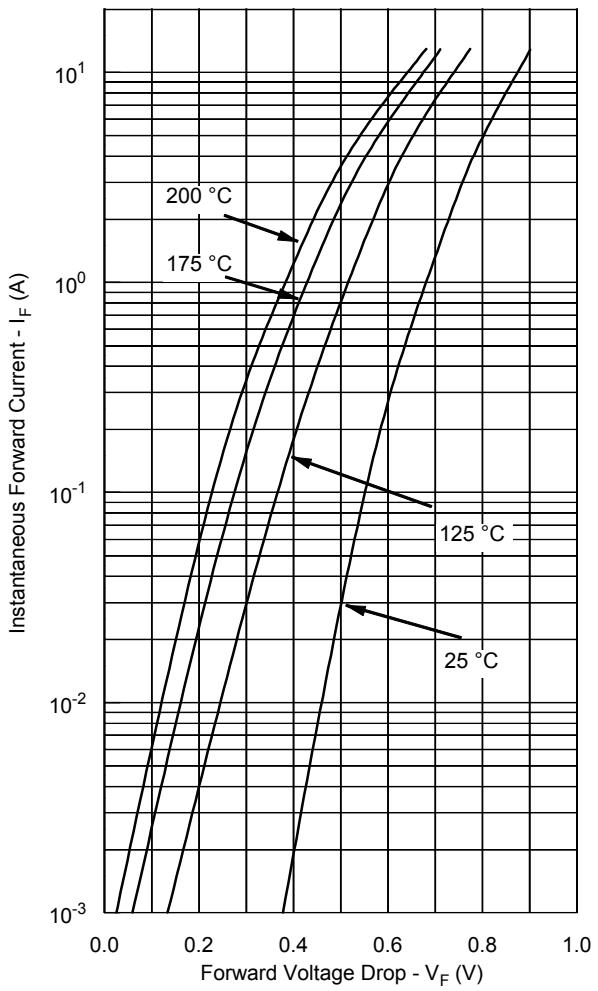



**SHD-1**

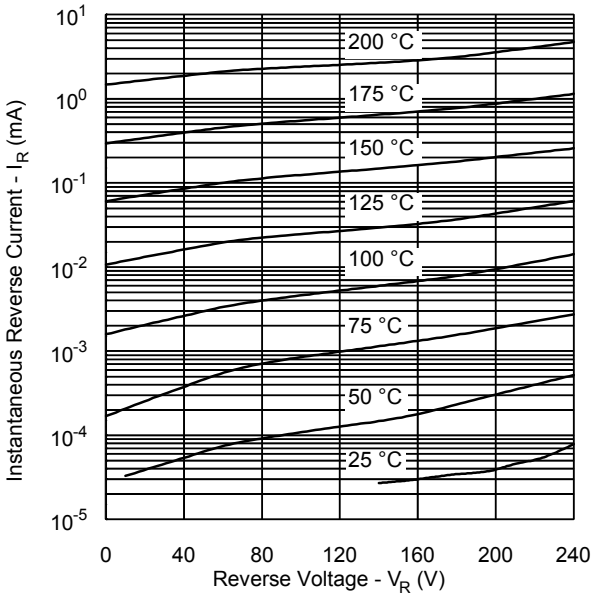



**SHD-1B**

### Typical Forward Characteristics




### Typical Reverse Characteristics




### Typical Junction Capacitance